METHOD, CIRCUIT LIBRARY AND COMPUTER PROGRAM PRODUCT FOR IMPLEMENTING ENHANCED PERFORMANCE AND REDUCED LEAKAGE CURRENT FOR ASIC DESIGNS

Abstract of the Disclosure

5   A method, apparatus and computer program product are provided for implementing application specific integrated circuit (ASIC) designs having high performance and reduced leakage current. Standard voltage threshold (SVT) circuits in a SVT circuit library are identified. For each SVT circuit, each SVT PFET is replaced with a low voltage threshold (LVT) PFET to

10   provide a hybrid alternate voltage threshold (AVT) circuit. Then the AVT circuits are saved in an alternate voltage threshold circuit library. The AVT circuit library provides enhanced performance as compared to the SVT circuit library without the high leakage current resulting from a LVT circuit library.